circuit and the second timing signal is adapted to be generated using a resistor-capacitor coupling circuit.

4. The device of claim **1**, wherein a third terminal of the discharging transistor, which controls activation of the discharging transistor, is coupled to an AC coupling circuit so as to be adapted to temporarily increase a voltage level on the third terminal above a voltage level on the voltage rail.

5. The device of claim **1**, wherein a second terminal of the charging transistor is coupled to ground so that, when activated, current is adapted to flow from the voltage rail through the inductor and through the charging transistor to ground.

6. The device of claim **1**, wherein the output node is coupled to an output antenna and the stylus pen is adapted to transmit user input signals over the antenna.

7. A stylus pen, comprising:

a power rail adapted to be coupled to a battery source;

an output antenna;

an inductor having a first end coupled to the power rail and a second end coupled to the output antenna;

a charging transistor having a first terminal coupled to the second end of the inductor, a second terminal coupled to ground, and a third terminal coupled to a charging control signal line; and

a discharging transistor having a first terminal coupled to the second end of the inductor, a second terminal coupled to the power rail, and a third terminal coupled to a discharging control signal line.

8. The stylus pen of claim **7**, wherein the third terminal of the discharging transistor is connected to an AC coupling circuit.

9. The stylus pen of claim **7**, wherein the charging control signal line is coupled to a resistor-capacitor timing circuit.

10. The stylus pen of claim **9**, wherein the discharging control signal line is coupled to a counter circuit so that the discharging control signal line is independently controlled from the charging control signal line.

11. The stylus pen of claim **7**, further including the battery source coupled to the power rail for producing a first voltage level, wherein the second end of the inductor is adapted to produce a second voltage level that is at least five times that of the first voltage level.

12. The stylus pen of claim **7**, further including an oscillator circuit coupled to a counter, the counter being adapted to generate a discharge signal on the discharging control signal line.

13. The stylus pen of claim **7**, further including a diode coupled between the first terminal of the discharging transistor and the first terminal of the charging transistor.

14. A method of producing a stylus pen output signal, comprising:

providing an inductor coupled between a power supply and an output antenna;

activating a charging transistor to draw current from the power supply through the inductor;

deactivating the charging transistor so as to generate a voltage level on the inductor output to the antenna that is greater than a voltage level of the power supply; and

activating a discharging transistor coupled between the power supply and the output antenna so as to drain the voltage level on the inductor output to the power supply voltage level.

15. The method of claim **14**, wherein activating the discharging transistor includes generating a voltage level on a gate of the discharging transistor that exceeds the power supply voltage level by using an AC coupling circuit coupled to the gate.

16. The method of claim **14**, wherein activating and deactivating the charging transistor includes applying a pulse to a resistor-capacitor circuit, the output of which supplies an input signal to a gate of the charging transistor.

17. The method of claim **16**, wherein activating the discharging transistor includes counting clock cycles provided by an oscillator and controlling an input to a gate of the discharging transistor based on the count.

18. The method of claim **14**, further including transmitting the stylus pen output signal from the output antenna using the voltage level generated on the inductor output.

19. The method of claim **18**, wherein the stylus pen output signal is an erasure signal.

20. The method of claim **14**, further including dividing a clock signal and using the divided clock in generating a signal to activate the discharge transistor.

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